Product Standard

User Interface:
X Window System Application Interface

The Open Group

Copyright © January 1998, The Open Group

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owners.

Motif,® OSF/1,® UNIX,® and the "X Device"® are registered trademarks and IT DialTone™ and The Open Group™ are trademarks of The Open Group in the U.S. and other countries.

Product Standard

User Interface: X Window System Application Interface

Document Number: X98UA

Published in the U.K. by The Open Group, January 1998.

Any comments relating to the material contained in this document may be submitted to:

The Open Group
Apex Plaza
Forbury Road
Reading
Berkshire RG1 1AX
U.K.

Or by email to:

OGSpecs@opengroup.org

Product Standard

NAME

X Window System Application Interface

LABEL FOR LOGO

No label.

DESCRIPTION

This Product Standard provides X Window System user interface services to applications via a programmatic interface. It includes the Xlib interface, the X Protocol, ICCCM, and the Xt Intrinsics, at the X11 Release 4 level.

It is optional whether the displays are local and/or remote and whether they employ the X Protocol (that is, the focus of this Product Standard is application portability).

CONFORMANCE REQUIREMENTS

Conforming implementations must be able to drive a local or a remote display device, or both.

Human-Computer Interface

Not applicable.

Portability Interface

Xlib-C Language Binding Specification.[1]

X Toolkit Intrinsics Specification.[2]

X Window System File Formats and Application Conventions Specification[3], Chapters 2 to 7, Inter-client Communications Conventions Manual (ICCCM).

X Window System File Formats and Application Conventions Specification, Chapters 8 to 11, X Logical Font Description (XLFD).

---

1. CAE Specification, August 1991, X/Open Window Management: Xlib-C Language Binding (ISBN: 1-872630-11-1, C140).
2. CAE Specification, July 1991, X/Open Window Management: X Toolkit Intrinsics (ISBN: 1-872630-14-6, C160).
3. CAE Specification, August 1991, X/Open Window Management: X Window System File Formats and Application Conventions (ISBN: 1-872630-15-4, C170).

Programming Language Environment

C Language. C language source programs invoking the services of this Product Standard must be supported by the registered product.

Interoperability

- Data Interchange Formats

  Products conforming to the X Window System Application Interface Product Standard may optionally support the interchange of textual data according to the X Window System File Formats and Application Conventions Specification.

- Communications Interfaces and Protocols

  Products conforming to the X Window System Application Interface Product Standard may optionally provide support for driving external displays according to the X Window System Protocol Specification[4], requirements on clients, and the X Window System File Formats and Application Conventions Specification, Chapters 2 to 7, Inter-client Communications Conventions Manual (ICCCM).

  Support for X Protocol over TCP/IP is required.

  Support for other transport protocols may be declared in the Conformance Statement.

OPERATIONAL ENVIRONMENT

Not applicable.

PORTABILITY ENVIRONMENT

XPG3 Internationalized System Calls and Libraries, Internationalized System Calls and Libraries, or Internationalized System Calls and Libraries Extended.

OVERRIDING STANDARDS

None.

INDICATORS OF COMPLIANCE

A Test Report from a currently authorized release of the VSW5 Test Suite.

The tests must be performed in a test environment that contains an X Window System Display and the X Window System Application Interface implementation interconnected with TCP/IP.

If external protocol support is claimed, then the X Protocol driving the display during the test must be carried over an external TCP/IP connection.

MIGRATION

The Xlib interface is upwards-compatible from that of the XPG3 Window Management Product Standard.

---

4. CAE Specification, July 1991, X/Open Window Management: X Window System Protocol (ISBN: 1-872630-13-8, C150).